

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026037**Date Inspected:** 17-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 13BE (Splice Plates)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Splice Plates to Deck Panel Diaphragm and full height Longitudinal Diaphragm at elevation 4750mm (from Bottom Panel) for Segment 13BE. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00693 dated July 17, 2011.

The Splice plates are installed between the following Panel Points at work point E3.

Between PP 121 to PP 121.5.

Between PP 121.5 to PP 122.

The bolt sizes used were M27 x 95 RC Lot # DHGM270035 and the final torque value established was 647 N-m.

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The bolt sizes used were M27 x 100 RC Lot # DHGM270039 and the final torque value established was 673 N-m.

The bolt sizes used were M27 x 120 RC Lot # DHGM270007 and the final torque value established was 863 N-m.

The bolt sizes used were M27 x 130 RC Lot # DHGM270014 and the final torque value established was 847 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Segment 13CE (Splice Plates)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Splice Plates to Deck Panel Diaphragm and full height Longitudinal Diaphragm at elevation 4750mm (from Bottom Panel) for Segment 13CE. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00693 dated July 17, 2011.

The Splice plates are installed between the following Panel Points at work point E3.

Between PP 122.5 to PP 123.

Between PP 123 to PP 123.5.

Between PP 123.5 to PP 124.

Between PP 124 to PP 124.5.

The bolt sizes used were M27 x 95 RC Lot # DHGM270035 and the final torque value established was 647 N-m.

The bolt sizes used were M27 x 100 RC Lot # DHGM270039 and the final torque value established was 673 N-m.

The bolt sizes used were M27 x 120 RC Lot # DHGM270007 and the final torque value established was 863 N-m.

The bolt sizes used were M27 x 130 RC Lot # DHGM270014 and the final torque value established was 847 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

Please reference the pictures attached for more comprehensive details.

Lift 14 West (U-Rib to U-Rib)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 127.3 and PP 127.5 for Lift 14 West. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00692 dated July 17, 2011.

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The bolt sizes used were M24 x 60 RC Lot # DHGM240001 and the final torque value established was 633 N-m.

The bolt sizes used were M24 x 65 RC Lot # DHGM240013 and the final torque value established was 540 N-m.

The Manual Torque wrench used was Serial No. XO2-676.

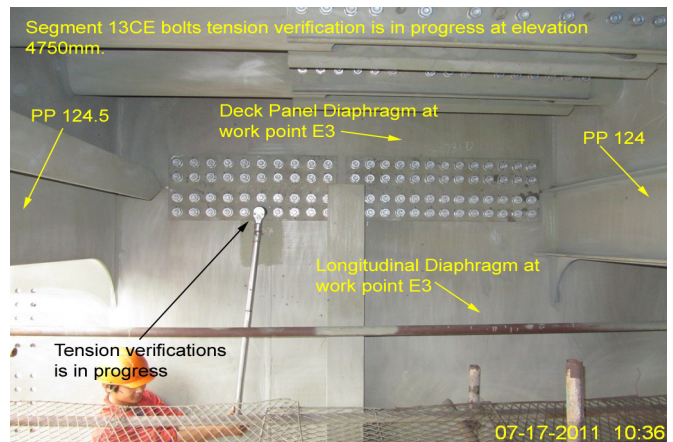
Note:

1.Tension verification were only offered at the following locations i.e., 1, 2, 7, 10, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 29, 30, 31, 33 and 34 (Total 21 locations) between work point W20 to W5.

2.Tension verification were not offered at the following locations i.e., 3, 4, 5, 6, 8, 9, 11, 12, 28, 32, 35, 36, 37, 38 and 39 (Total 15 locations) between work point W20 to W5.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer